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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/747,669	12/29/2003	Fusasuke Gotoh	KAM 17.895B (100799-00090)	1565
26304	7590	12/13/2005	EXAMINER	
KATTEN MUCHIN ROSENMAN LLP 575 MADISON AVENUE NEW YORK, NY 10022-2585			JOYCE, WILLIAM C	
			ART UNIT	PAPER NUMBER
			3682	

DATE MAILED: 12/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/747,669	Applicant(s) GOTOH, FUSASUKE	
	Examiner William C. Joyce	Art Unit 3682	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) 2 and 4 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,5 and 6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 09/691,457.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This is the First Office Action in response to the Election Filed on September 27, 2005.

Election/Restrictions

1. Claims 2 and 4 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on September 27, 2005. Note, claim 2 was indicated as reading on the elected species, however claim 2 appears to include features illustrated in the non-elected species of at least Figure 28. For example, the elected species of Figure 12-15 do not illustrate the pockets having an inner peripheral surface formed in a spherical concave shape having a radius of curvature slightly larger than the radius of curvature of the balls. Accordingly, claim 2 is withdrawn from further consideration.

2. Applicant's election with traverse of Groups I and XI in the reply filed on September 27, 2005 is acknowledged. The traversal is on the ground(s) that claims 1 and 2 are generic. This is not found persuasive because (a) both claims 1 and 2 do not appear to be generic to each species, (b) an application having a generic claim does not overcome an Election requirement since the application may disclose multiple patentably distinct species, and (c) claims 1 and 2 have not been found to be allowable, wherein all claims dependent on an allowable generic claim will be rejoined prior to allowance. The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 3 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

On line 2 of claim 3, the addition of the word "type" to an otherwise definite expression extends the scope of the expression so as to render it indefinite. Ex parte Copenhagen, 109 USPQ 118 (Bd. App. 1955).

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

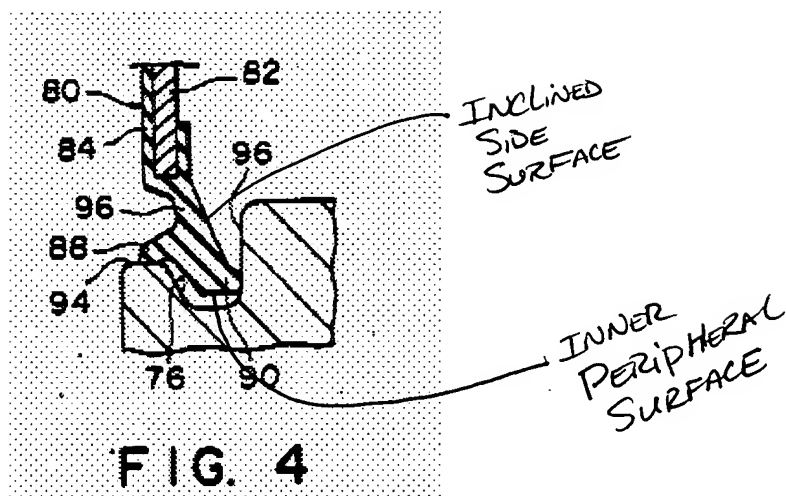
(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Mutoh et al. (US Patent 6,068,408).

Figure 1 of Mutoh et al. illustrates a retainer for a ball bearing formed in a generally annular shape and having a plurality of pockets (8) arranged in a circumferential direction to hold a plurality of balls along a pitch circle, the pockets each having an opening on outer and inner sides in the radial direction of the retainer, the pockets having an inner peripheral surface formed such that a diameter of the pockets are larger than the diameter of the balls at a position located inward of the pitch circle, a diameter of the pockets on the outer side in a radial direction of the retainer has a diameter smaller than the diameter of the balls.

7. Claim 5 is rejected under 35 U.S.C. 102(b) as being anticipated by Uchida et al. (US Patent 5,037,213).

Uchida et al. illustrates in Figure 4 a seal as shown below. The seal having an inclined side surface opposing a wall surface of a seal groove, an inner peripheral surface located radially inward of the inclined side surface and opposing a bottom surface of the seal groove, a continuation portion for continuously connecting the inclined side surface with the inner peripheral surface, the continuation portion being in sliding contact with the seal groove, the angle between the wall surface of the seal groove and the inclined side surface being in a range from 10 degrees to 45 degrees, the inner peripheral surface of the seal being parallel to the bottom of the seal groove. Note the Figure below.



8. Claim 5 is rejected under 35 U.S.C. 102(b) as being anticipated by applicant's admitted prior art of Figures 7-8.

Applicant's admitted prior art of Figures 7-8 illustrates a seal comprising an inclined side surface (120) opposing a wall surface (115) of a seal groove, an inner peripheral surface located radially inward of the inclined side surface and opposing a bottom surface of the seal groove, a continuation portion for continuously connecting the inclined side surface with the inner peripheral surface, the continuation portion being in sliding contact with the seal groove, the angle (α) between the wall surface of the seal groove and the inclined side surface being approximately 13 degrees, the angle (β) between the inner peripheral surface of the seal and the bottom of the seal groove being approximately 15 degrees.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mutoh et al. (US Patent 6,068,408).

As described above, Mutoh et al. teaches a retainer having the claimed pockets. Referring to Figure 11, Mutoh et al. teaches a crown shaped retainer having elastic pieces provided on one side in the axial direction of the annular main portion. It would have been obvious to one of ordinary skill in the art at the time the invention was made to form the retainer illustrated in either Figures 1 or 4 of Mutoh et al. with elastic pieces, as taught in Figure 11 of Mutoh et al. motivation being to provide flexibility to the retainer.

11. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Uchida et al. (US Patent 5,037,213).

As described above, Uchida et al. discloses in Figure 4 a seal having the features defined by claim 5, but Figure 4 does not appear to show the continuation portion being formed on a curved surface defining an arch shape in cross section. It was known in the art to form the portion of a lip seal that engages a bearing race as a curved arch shaped surface. For example, Figure 2 of Uchida et al. illustrates the

portion of the seal (6) that engages a side wall (38) of a seal groove as a curved arch shaped surface. It would have been obvious to one of ordinary skill in the art at the time the invention was made to form the continuation portion illustrated in Figure 4 of Uchida et al. with a curved arch shaped surface, as illustrated in Figure 2 of Uchida et al., motivation being to reduce the contact surface between the relatively moving components.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Note the seal arrangement of Takahashi et al. ('335), Ishiguro ('609), and Okumura et al. ('748).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William C. Joyce whose telephone number is (571) 272-7107. The examiner can normally be reached on Monday - Thursday 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on (571) 272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3682

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

 12/9/05
William C. Joyce